

AMENDMENTS TO THE DRAWINGS

Attached is one (1) sheet of replacement drawings containing Figures 1-2. Figure 1 has been amended to be designated as "Prior Art". Please replace the original drawings containing Figures 1-2 with the attached replacement drawings containing corresponding Figures 1-2.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

REMARKS

These remarks and the accompanying amendments are responsive to the Office Action dated February 19, 2008 (hereinafter referred to as the "Office Action"). At the time of the last examination, Claims 1 and 3-9 were pending, of which Claim(s) 1 and 6 are independent. The Office Action rejected Claims 1 and 3-9. By this response, the independent Claims 1 and 6 are amended, dependent Claims 5 and 7 are also amended, and dependent Claims 4, 8 and 9 are cancelled. Accordingly, upon entry of this amendment, Claims 1, 3, 5, 6 and 7 will be pending, once again with only Claims 1 and 6 being independent.

Sections 3 and 4 of the Office Action objected to the drawings. In response, this amendment includes corrected drawings that amend Figure 1 to include the "Prior Art" identifier. Thus, this response is indeed responsive to the objection to the drawings.

Sections 5 and 6 object to several of the claims. However, each of the specified objections are believed to be overcome by the claim amendments made herein.

Section 10 of the Office Action rejects Claim 1, 3, 5, 6, 7 under 35 U.S.C. 103(a) as being unpatentable over United States patent publication number 2003/0165341A1 applied for by Henning Bulow (the patent application publication hereinafter referred to simply as "Bulow").

The Office Action asserts that the previous claims were unpatentable over Bulow. However, this assertion is based on an incorrect interpretation of the prior art. Specifically, Bulow does not disclose a filter that gives rise to pulses having "a minimum substantially in the centre of each time slot adjacent to the time slot for that pulse". Paragraph 27 of Bulow states that the conversion filter broadens pulses only to such an extent that they "do not overlap into adjacent time windows, or only overlap such, that time channel division at receivers [sic] side

remains possible". This cannot be squared with the concept of a temporal profile that extends into the center of the adjacent time slot as required by the present claims.

Bulow itself states its limitations in paragraph 27 - it relies on 'time channel division'. Unlike the present invention, which operates in a wavelength division multiplexed (WDM) environment, Bulow distinguishes signals by the time at which they arrive at the receiver. WDM systems are entirely different, since they distinguish between separate signals by their characteristic wavelength. This is the reason why the recited claims are concerned with reducing the bandwidth of the signal (but only to the extent that given bits in a particular signal can still be deduced). The recited claims therefore relates to entirely different technology to Bulow. In fact, time division multiplexing and wavelength division multiplexing are mutually exclusive. This in itself is a reason why it would not be considered obvious to one skilled in the art to modify Bulow to reach the recited claims.

Moreover, the amendments presented in the attached claims further distinguish from Bulow. Specifically, they require that the filter is "detuned to optimize transmission performance". As the Examiner accepts, there is no teaching of such a technique in Bulow. However, the Examiner has argued that this feature is obvious over Bulow in view of Nakajima (US2001/0019436).

Quite apart from the fact that, as explained above, Bulow is an inappropriate starting point for an obviousness attack on the present claims, the Office Action has failed to appreciate the distinction between the filter described in Nakajima and that used by Bulow. Even if it were the case, which the applicants do not concede, that the adjustment of the Nakajima filter falls under the scope of the term "detuning", techniques applied to this filter would not, and indeed could not, be applied to the conversion filter described by Bulow.

The filter described by Bulow reduces the bandwidth of an optical signal. However, the filter described by Nakajima does no such thing, but rather adjusts the relative amplitudes of a number of signals across an optical spectrum. That is, Nakajima increases or decreases the amplitude of signal 1 at frequency A relative to signal 2 at frequency B. The bandwidth of neither signal is affected.

Simply put, the Nakajima filter is irrelevant to the recited claims. In a real life system, it is possible that both filters (that of the recited claims and that of Nakajima) could be employed, serving different purposes and forming different parts of the system. Teaching regarding one can not be applied to the other as they are fundamentally different in both nature and purpose.

For at least the reasons above, each of the recited claims are patentable over the cited art, either singly or in combination.

Section 11 of the Office Action rejects Claim 4, 8 and 9 under 35 U.S.C. 103(a) as being unpatentable over Bulow in view of United States patent publication number 2001/0019436A1 applied for by Nakajima et al. (the patent application publication hereinafter referred to simply as "Nakajima"). This rejection is rendered moot by the cancellation of Claims 4, 8 and 9. Nevertheless, some of these features of these dependent claims have been incorporated into the independent claims, as previously discussed.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 19th day of May, 2008.

Respectfully submitted,



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Fig. 1.
(Prior Art)

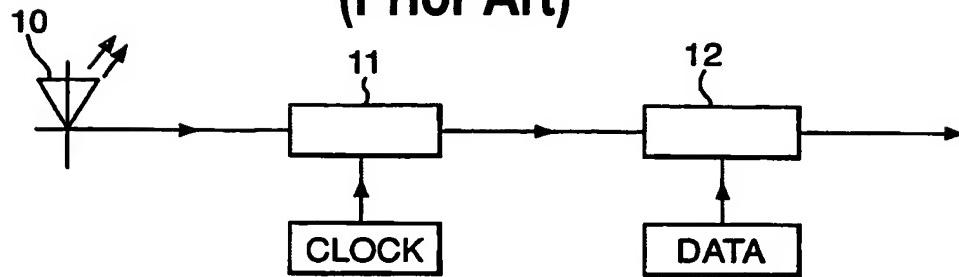


Fig. 2.

